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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,421	01/18/2002	Bruce Ferguson	5650-02400	9077

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EXAMINER	
HOLMES, MICHAEL B	

ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,421	FERGUSON ET AL.	
	Examiner	Art Unit	
	Michael B. Holmes	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *(3)* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/18/2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/19/03;7/9/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Detailed Office Action*.

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Examiner's Detailed Office Action

1. This Office Action is responsive to application 10/051,421, filed January 18, 2002.

2. Claims 1-90 have been examined.

Claim Objection(s)

3. Claim 3 has a typo i.e., "system system."

4. Claims 68-90 are objected to because applicant employs the language of a "carrier medium" which is not supported in the written description of the specification. However, it appears as if the intended usage is "memory medium" which is supported in the written description of the specification, and if substituted will satisfy the requirement. Appropriate correction is required.

Double Patenting

5. Claims 1-90 of the present Application No. 10/051,421 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-90 of copending Application No. 10/051,574. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Keeler et al.* (USPN 5,729,661) in view of *Church et al.* (USPN 5,794,234).

Regarding claim 1. *Keeler et al.* describes a data preprocessor (*see* Abstract) for preprocessing input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17 *Examiner interprets electronic commerce data operable within the set of all data*] for a non-linear model used to control an electronic commerce system [*see Church et al.* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17], wherein said non-linear model comprises multiple inputs [*see* Fig. *Keeler et al.* 16, C 3, L 1-16], each of the inputs associated with a portion of the input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17], comprising: an input buffer for receiving and storing the input electronic commerce data, the input electronic commerce data associated with at least two of the inputs being on different time scales relative to each other [*see Keeler et al.* C 2, L 46-53]; to a time merge device for selecting a predetermined time scale and reconciling the input electronic commerce data stored in the input buffer such that all of the input electronic commerce data for all of the inputs are on the same time scale [*see Keeler et al.* C 2, L 46-53]; and an output device for outputting the electronic commerce data reconciled by the time merge device as reconciled electronic commerce data, said reconciled electronic commerce data comprising the input elec-

tronic commerce data to the non-linear model [*see Keeler et al.* C 2, L 46-56 & C 3, L 1-7]. However, *Keeler et al.* does not describe an electronic commerce system and electronic commerce data (*Examiner interprets electronic commerce data operable within the set of all data*). *Church et al.* describes an electronic commerce system [*see* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17] and electronic commerce data [*see* Fig. 2, C 4, L 3-17]. It would have been obvious at the time the invention was made to a persons having ordinary skill in the art to combine *Keeler et al.* with *Church et al.* because the interconnection of various data processing systems has encouraged the growth of electronic commerce. More and more businesses are employing communication networks to exchange business transactions between various trading partners. This electronic exchange has the advantage of providing new levels of efficiency which allow businesses to maintain a competitive advantage [*see Church et al.* C 1, L 11-17].

Regarding claim 24. *Keeler et al.* describes a data preprocessor (*see* Abstract) for preprocessing input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17 *Examiner interprets electronic commerce data operable within the set of all data*] for a non-linear model used to control an electronic commerce system [*see Church et al.* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17], wherein said non-linear model comprises multiple inputs [*see Keeler et al.* Fig. 16, C 3, L 1-16], each of the inputs associated with a portion of the input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17], comprising: an input buffer for receiving and storing the input electronic commerce data, the input electronic commerce data associated with at least two of the inputs being on different independent variable scales relative to each other [*see Keeler et al.* C 3, L 1-7 *Examiner interprets the independent variables to be the set of training data*]; to a merge device

(*Examiner interprets a time merge device operable within the set of all merge* devices) for selecting a predetermined independent variable scale and reconciling the input electronic commerce data stored in the input buffer such that all of the input electronic commerce data for all of the inputs are on the same independent variable scale [*see Keeler et al.* C 2, L 46-53]; and an output device for outputting the electronic commerce data reconciled by the merge device as reconciled electronic commerce data, said reconciled electronic commerce data comprising the input electronic commerce data to the non-linear model [*see Keeler et al.* C 2, L 46-56 & C 3, L 1-7]. However, *Keeler et al.* does not describe an electronic commerce system and electronic commerce data (*Examiner interprets electronic commerce data operable within the set of all data*). *Church et al.* describes an electronic commerce system [*see* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17] and electronic commerce data [*see* Fig. 2, C 4, L 3-17]. It would have been obvious at the time the invention was made to a persons having ordinary skill in the art to combine *Keeler et al.* with *Church et al.* because the interconnection of various data processing systems has encouraged the growth of electronic commerce. More and more businesses are employing communication networks to exchange business transactions between various trading partners. This electronic exchange has the advantage of providing new levels of efficiency which allow businesses to maintain a competitive advantage [*see Church et al.* C 1, L 11-17].

Regarding claim 31. *Keeler et al.* describes a method for preprocessing (*see* Abstract) input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17 *Examiner interprets electronic commerce data operable within the set of all data*] prior to input to a non-linear model used to control an electronic commerce system [*see Church et al.* Fig. 1 through Fig. 3, C 3 L 40 to

C 4, L 17], wherein said non-linear model comprises multiple inputs [*see Keeler et al.* Fig. 16, C 3, L 1-16], each of the inputs associated with a portion of the input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17], the method comprising: receiving and storing the input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17], the input electronic commerce data associated with at least two of the inputs being on different time scales relative to each other [*see Keeler et al.* C 2, L 46-53]; time merging the input electronic commerce data for the inputs such that all of the input electronic commerce data are reconciled to the same time scale [*see Keeler et al.* C 2, L 46-53]; and outputting the reconciled time merged electronic commerce data as reconciled electronic commerce data, the reconciled electronic commerce data comprising the input electronic commerce data for the non-linear model [*see Keeler et al.* C 2, L 46-56 & C 3, L 1-7].

However, *Keeler et al.* does not describe an electronic commerce system and electronic commerce data (*Examiner interprets electronic commerce data operable within the set of all data*). *Church et al.* describes an electronic commerce system [*see* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17] and electronic commerce data [*see* Fig. 2, C 4, L 3-17]. It would have been obvious at the time the invention was made to a persons having ordinary skill in the art to combine *Keeler et al.* with *Church et al.* because the interconnection of various data processing systems has encouraged the growth of electronic commerce. More and more businesses are employing communication networks to exchange business transactions between various trading partners. This electronic exchange has the advantage of providing new levels of efficiency which allow businesses to maintain a competitive advantage [*see Church et al.* C 1, L 11-17].

Regarding claim 54. *Keeler et al.* describes a method for preprocessing (*see* Abstract) input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17 *Examiner interprets electronic commerce data operable within the set of all data*] for a non-linear model used to control an electronic commerce system [*see Church et al.* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17], wherein said non-linear model comprises multiple inputs [*see Keeler et al.* Fig. 16, C 3, L 1-16], each of the inputs associated with a portion of the input electronic commerce data, comprising: receiving and storing the input electronic commerce data, the input electronic commerce data associated with at least two of the inputs being on different independent variable scales relative to each other [*see Keeler et al.* C 2, L 46-53], reconciling the input electronic commerce data stored in the input buffer such that all of the input electronic commerce data for all of the inputs are on the same independent variable scale to generate reconciled electronic commerce data [*see Keeler et al.* C 2, L 46-56]; and outputting reconciled electronic commerce data, said reconciled electronic commerce data comprising the input electronic commerce data to the non-linear model [*see Keeler et al.* C 2, L 46-56 & C 3, L 1-7].

However, *Keeler et al.* does not describe an electronic commerce system and electronic commerce data (*Examiner interprets electronic commerce data operable within the set of all data*). *Church et al.* describes an electronic commerce system [*see* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17] and electronic commerce data [*see* Fig. 2, C 4, L 3-17]. It would have been obvious at the time the invention was made to a persons having ordinary skill in the art to combine *Keeler et al.* with *Church et al.* because the interconnection of various data processing systems has encouraged the growth of electronic commerce. More and more businesses are employing communication networks to exchange business transactions between various trading partners. This elec-

tronic exchange has the advantage of providing new levels of efficiency which allow businesses to maintain a competitive advantage [*see Church et al.* C 1, L 11-17].

Regarding claim 61. *Keeler et al.* describes a system for preprocessing (*see* Abstract) input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17 *Examiner interprets electronic commerce data operable within the set of all data*] for a non-linear model used to control an electronic commerce system [*see Church et al.* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17], wherein said non-linear model comprises multiple inputs [*see Keeler et al.* describes Fig. 16, C 3, L 1-16], each of the inputs associated with a portion of the input electronic commerce data, comprising: means for receiving and storing the input electronic commerce data, the input electronic commerce data associated with at least two of the inputs being on different independent variable scales relative to each other [*see Keeler et al.* C 2, L 46-53]; means for reconciling the input electronic commerce data stored in the input buffer such that all of the input electronic commerce data for all of the inputs are on the same independent variable scale to generate reconciled electronic commerce data [*see Keeler et al.* C 2, L 46-56]; and means for outputting reconciled electronic commerce data, said reconciled electronic commerce data comprising the input electronic commerce data to the non-linear model [*see Keeler et al.* C 2, L 46-56 & C 3, L 1-7].

However, *Keeler et al.* does not describe an electronic commerce system and electronic commerce data (*Examiner interprets electronic commerce data operable within the set of all data*). *Church et al.* describes an electronic commerce system [*see* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17] and electronic commerce data [*see* Fig. 2, C 4, L 3-17]. It would have been obvious

at the time the invention was made to a persons having ordinary skill in the art to combine *Keeler et al.* with *Church et al.* because the interconnection of various data processing systems has encouraged the growth of electronic commerce. More and more businesses are employing communication networks to exchange business transactions between various trading partners. This electronic exchange has the advantage of providing new levels of efficiency which allow businesses to maintain a competitive advantage [*see Church et al.* C 1, L 11-17].

Regarding claim 68. *Keeler et al.* describes a carrier medium which stores program instructions for preprocessing [*see* Fig. 1, item 12 & item 14 *Examiner interprets the instructions as the algorithms employed for providing the overall preprocessing operation*], input electronic commerce data [*see Church et al.* Fig. 2, C 4, L 3-17 *Examiner interprets electronic commerce data operable within the set of all data*] prior to input to a non-linear model used to control an electronic commerce system, wherein said non-linear model comprises multiple inputs [*see Keeler et al.* describes Fig. 16, C 3, L 1-16], each of the inputs associated with a portion of the input electronic commerce data, wherein said program instructions are executable to: receive and store the input electronic commerce data, wherein the input electronic commerce data associated with at least two of the inputs are on different time scales relative to each other [*see Keeler et al.* C 2, L 46-53]; time merge the input electronic commerce data for the inputs such that all of the input electronic commerce data are reconciled to the same time scale [*see Keeler et al.* C 2, L 46-53]; and output the reconciled time merged electronic commerce data as reconciled electronic commerce data, the reconciled electronic commerce data comprising the input electronic commerce data to the non-linear model [*see Keeler et al.* C 2, L 46-56 & C 3, L 1-7].

However, *Keeler et al.* does not describe an electronic commerce system and electronic commerce data (*Examiner interprets electronic commerce data operable within the set of all data*). *Church et al.* describes an electronic commerce system [*see* Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17] and electronic commerce data [*see* Fig. 2, C 4, L 3-17]. It would have been obvious at the time the invention was made to a persons having ordinary skill in the art to combine *Keeler et al.* with *Church et al.* because the interconnection of various data processing systems has encouraged the growth of electronic commerce. More and more businesses are employing communication networks to exchange business transactions between various trading partners. This electronic exchange has the advantage of providing new levels of efficiency which allow businesses to maintain a competitive advantage [*see Church et al.* C 1, L 11-17].

Regarding claims 2, 25, 32, 55, 62 & 69. wherein the non-linear model includes a set of model parameters defining a representation of the electronic commerce system, said model parameters capable of being trained; wherein the input electronic commerce data comprise training electronic commerce data including target input electronic commerce data and target output electronic commerce data, wherein said reconciled electronic commerce data comprise reconciled training electronic commerce data including reconciled target input electronic commerce data and reconciled target output electronic commerce data, and wherein said reconciled target input electronic commerce data and reconciled target output electronic commerce data are both based on a common time scale [*see Keeler et al.,* C 2, L 46 to C 3, L 26 & C 4, L 40-47]; and wherein the non-linear model is operable to be trained according to a predetermined training algorithm applied to said reconciled target input electronic commerce

data and said reconciled target output electronic commerce data to develop model parameter values such that said non-linear model has stored therein a representation of the electronic commerce system that generated the target output electronic commerce data in response to the target input electronic commerce data [*see Keeler et al.* C 21, L 3-17, & Abstract; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 3, 26, 33, 56, 63 & 70. wherein the non-linear model comprises a non-linear model having a set of model parameters defining a representation of the electronic system, wherein said model parameters of said non-linear model have been trained to represent said electronic commerce system; wherein the input electronic commerce data comprise run-time electronic commerce data, and wherein said reconciled electronic commerce data comprise reconciled run-time electronic commerce data; and to wherein the non-linear model is operable to receive said reconciled run-time electronic commerce data and generate run-time output electronic commerce data, wherein said run-time output electronic commerce data comprise one or both of control parameters for said system and predictive output information for said system [*see Keeler et al.* C 3, L 1-17, & Abstract; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 4, 34 & 71. wherein said control parameters are usable to determine control inputs to said system for run-time operation of said system [*see Keeler et al.* C 5, L 11-30].

Regarding claim 5, 27, 35, 57, 64 & 72. wherein the input electronic commerce data associated with at least one of the inputs has missing electronic commerce data in an associated time sequence and said time merge device is operable to reconcile said input electronic commerce data to fill in said missing electronic commerce data [*see Keller et al.*, Abstract, C 1, L 26-48 & C 4, L 1-59; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 6, 28, 36, 58, 65 & 73. wherein the input electronic commerce data associated with a first one or more of the inputs has an associated time sequence based on a first time interval, and a second one or more of the inputs has an associated time sequence based on a second time interval [*see Keeler et al.* C 7, L 10-32]; and wherein said time merge device is operable to reconcile said input electronic commerce data associated with said first one or more of the inputs to said input electronic commerce data associated with said second one or more of the inputs, thereby generating reconciled input electronic commerce data associated with said at least one of the inputs having an associated time sequence based on said second time interval [*see Keeler et al.* C 7, L 10-32; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 7, 29, 37,59, 66 & 74. wherein the input electronic commerce data associated with a first one or more of the inputs has an associated time sequence based on a first time interval, and wherein the input electronic commerce data associated with a second one or more of the inputs has an associated time sequence based on a second time interval; and wherein said time merge device is operable to reconcile said input electronic commerce data associated with said first one or more of the inputs and said input electronic commerce data associated with said second one or more of the inputs to a time scale based to on a third time interval, thereby generating reconciled input electronic commerce data associated with said first one or more of the inputs and said second one or more of the inputs having an associated time sequence based on said third time interval [*see* Fig. 5b, C 8, L 10-36; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 8, 30, 38, 60, 67 & 75. wherein the input electronic commerce data associated with a first one or more of the inputs is asynchronous, and wherein the input electronic commerce data associated with a second one or more of the inputs is synchronous with an associated time sequence based on a time interval [*see Keeler et al.,* C 1, L 18-23, C 2, L 11-15 & Fig. 5*b*, C 8, L 10-53; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3, L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*]; and wherein said time merge device is operable to reconcile said asynchronous input electronic commerce data associated with said first one or more of the inputs to said synchronous input electronic commerce data associa-

ted with said second one or more of the inputs, thereby generating reconciled input electronic commerce data associated with said first one or more of the inputs, wherein said reconciled input electronic commerce data comprise synchronous input electronic commerce data having an associated time sequence based on said time interval [*see Keeler et al.,* C 1, L 18-23, C 2, L 11-15 & Fig. 5*b*, C 8, L 10-53; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 9-16, 39-46 & 76-83. wherein said input buffer is controllable to arrange the input electronic commerce data in a predetermined format [*see Keeler et al.* C 2, L 46-67 & FIG. 1, C 4, L 21-65; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 17, 47 & 84. wherein the input electronic commerce data comprise a plurality of variables, each of the variables comprising an input variable with an associated set of electronic commerce data wherein each of said variables comprises an input to said input buffer; and wherein each of at least a subset of said variables comprises a corresponding one of the inputs to the non-linear model [*see Keeler et al.,* C 3, L 17-26 & C 4, L 21-39; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3 L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 18, 48 & 85. a delay device for receiving reconciled electronic commerce data associated with a select one of said input variables and introducing a predetermined mount of delay to said reconciled electronic commerce data to output a delayed input variable and associated set of delayed input reconciled electronic commerce data [*see Keeler et al.,* FIG. 1, item 16, C 3, L 17-26; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3, L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 19, 49 & 86. wherein said predetermined amount of delay is a function of an external variable, the data preprocessor further comprising: means for varying said predetermined amount of delay as a function of said external variable [*see Keeler et al.,* FIG. 1, item 16, C 3, L 17-26; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3, L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 20, 50 & 87. means for learning said predetermined delay as a function of training parameters generated by the electronic commerce system modeled by the non-linear model [*see Keeler et al.* C 3, L 1-16 & C 5, L 31-39; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3, L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

Regarding claims 21-23, 51-53 & 88-90. a graphical user interface (GUI) which is operable to receive user input specifying one or more electronic commerce data manipulation and/or reconciliation operations to be performed on said input electronic commerce data [*see Keeler et al.* FIG. 2, item 62, C 5, L 37-46; FIG. 6, item 76 & FIG 7a-7f, C 8, L 54 to C 9, L 9 & C 10, L 32-48; *also see Church et al.* describes an electronic commerce system Fig. 1 through Fig. 3, C 3, L 40 to C 4, L 17, and electronic commerce data Fig. 2, C 4, L 3-17, *Examiner interprets electronic commerce data operable within the set of all data*].

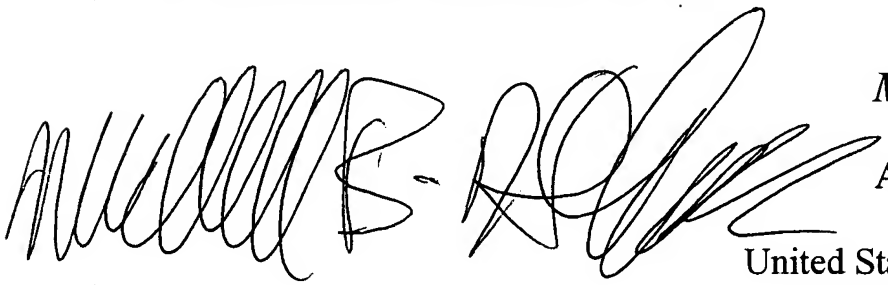
Correspondence Information

8. Any inquires concerning this communication or earlier communications from the examiner should be directed to Michael B. Holmes, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-3686 or facsimile transmission (571) 273-3686 or email Michael.holmesb@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (703) 746-7239.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, Anthony Knight, may be reached at (571) 272-3687.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.



Michael B. Holmes
Patent Examiner
Artificial Intelligence
Art Unit 2121
United States Department of Commerce
Patent & Trademark Office

Friday, May 13, 2005

MBH